UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

65565

7500

09/24/2010

SUGHRUE-265550 2100 PENNSYLVANIA AVE. NW WASHINGTON, DC 20037-3213

EXAMINER				
GREEN, TRACIE Y				
ART UNIT	PAPER NUMBER			

2879

DATE MAILED: 09/24/2010

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	10/587,029	07/24/2006	Masahiro Orita	Q96124	9255

TITLE OF INVENTION: QUANTUM DOT-DISPERSED LIGHT EMITTING DEVICE, AND MANUFACTURING METHOD THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/27/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence including delow or directed other tions.	g the Patent, advance erwise in Block 1, by	orders and notification of not	maintenance fees wi spondence address;	ill be mai and/or (b	iled to the current of indicating a separ	correspondence address as ate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				(s) Transmittal. This	certificat paper, su	te cannot be used fo ich as an assignmen	domestic mailings of the r any other accompanying t or formal drawing, must
65565	7590 09/24	/2010	nave			5	elector.
	55550 LVANIA AVE. NW I, DC 20037-3213		I he State addr trans	reby certify that this es Postal Service wi ressed to the Mail smitted to the USPT	s Fee(s) T ith sufficion Stop 1SS O (571) 2	Mailing or Transn Fransmittal is being ent postage for first SUE FEE address a 273-2885, on the da	deposited with the United class mail in an envelope above, or being facsimile te indicated below.
							(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORN	EY DOCKET NO.	CONFIRMATION NO.
10/587,029	07/24/2006	· ·	Masahiro Orita	•	(	Q96124	9255
			ITTING DEVICE, AND MA				
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE 1	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	12/27/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	J			
GREEN, T	TRACIE Y	2879	313-503000				
"Fee Address" ind PTO/SB/47; Rev 03-C Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Unl	ND RESIDENCE DATA less an assignee is identi h in 37 CFR 3.11. Comp	'Indication form ed. Use of a Customer  A TO BE PRINTED Offied below, no assign	registered attorney or a	wely, e firm (having as a agent) and the name rneys or agents. If n printed.  De) atent. If an assigne assignment.	member a s of up to so name is	a 2	cument has been filed for
Please check the appropr  4a. The following fee(s):  Issue Fee		categories (will not be	printed on the patent):  4b. Payment of Fee(s): (Plea				ap entity Government
	No small entity discount p	permitted)	Payment by credit card. Form PTO-2038 is attached.				
Advance Order - # of Copies		The Director is hereby overpayment, to Depo	he Director is hereby authorized to charge the required fee(s), any deficiency, or credit any verpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Star  a. Applicant claim	<b>tus</b> (from status indicated s SMALL ENTITY statu	,	☐ b. Applicant is no long	ger claiming SMAL	L ENTIT	Y status. See 37 CF.	R 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if requeecords of the United Sta	uired) will not be acceptes Patent and Tradema	pted from anyone other than that Office.	he applicant; a regis	tered atto	rney or agent; or the	assignee or other party in
Authorized Signature				Data			
Authorized Signature  Typed or printed name				Registration No	0		
an application. Confident submitting the completed this form and/or suggesti	tiality is governed by 35 d application form to the ions for reducing this bu	U.S.C. 122 and 37 CF USPTO. Time will varden, should be sent to	ation is required to obtain or r FR 1.14. This collection is est ary depending upon the indiv the Chief Information Office R COMPLETED FORMS TO	imated to take 12 m ridual case. Any cor er. U.S. Patent and T	ninutes to mments or Frademark	complete, including n the amount of tim k Office, U.S. Depar	ggathering, preparing, and be you require to complete truent of Commerce, P.O.

Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/587,029	07/24/2006	Masahiro Orita	Q96124	9255	
65565 7	590 09/24/2010		EXAMINER		
SUGHRUE-265	550		GREEN, TRACIE Y		
2100 PENNSYLV			ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20037-3213			2879		
			DATE MAILED: 09/24/201	0	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 289 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 289 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
As a second second	10/587,029	ORITA ET AL.	
Notice of Allowability	Examiner	Art Unit	
	TRACIE GREEN	2879	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85; NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commits IGHTS. This application is	n this application. If not included unication will be mailed in due course. <b>THIS</b>	'e
1. This communication is responsive to <u>07/16/2010</u> .			
2. ☑ The allowed claim(s) is/are <u>1-13</u> .			
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority u</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	e been received. e been received in Applicati	on No	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements	
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv</li> </ol>			
<ul> <li>5. CORRECTED DRAWINGS (as "replacement sheets") mure (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the company of the deposit of t</li></ul>	son's Patent Drawing Revie  's Amendment / Comment on I.84(c)) should be written on the the header according to 37 Cosit of BIOLOGICAL MAT	r in the Office action of  he drawings in the front (not the back) of FR 1.121(d).  ERIAL must be submitted. Note the	
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit	5. ☐ Notice of Interview S Paper No. 7. ☐ Examiner's	nformal Patent Application fummary (PTO-413), /Mail Date Amendment/Comment Statement of Reasons for Allowance	
of Biological Material	9.	-·	

#### **DETAILED ACTION**

# Response to Amendment

1. Receipt is acknowledged of applicant's amendment filed 07/16/2010. Claims 1-13 are pending and an action on the merits is as follows.

# Response to Arguments

2. Applicant's arguments, see Remarks, filed 07/16/2010, with respect to claim 1 have been fully considered and are persuasive. The rejections of claims 1-13 are hereby withdrawn.

# Allowable Subject Matter

4. Claims 1-13 are allowed.

The following is an examiner's statement of reasons for allowance:

**Regarding claims 1,** prior art of records fail to teach or suggest the combination of limitations set forth in claim 1; specifically for the limitation "dispersed as luminescent centers in the ambipolar inorganic semiconductor material in which coating materials for coating surfaces of the nanocrystals are eliminated from the surfaces of the nanocrystals" in combination with other features of the present claimed invention.

**Regarding claims 2-13,** these claims are allowable for the reasons given for claim1, and because of their dependency status on this claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on

Application/Control Number: 10/587,029 Page 3

Art Unit: 2879

Statement of Reasons for Allowance."

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRACIE Y. GREEN whose telephone number is (571)270-3104. The examiner can normally be reached on Monday-Thursday, 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571/272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Tracie Y Green/ Examiner, Art Unit 2879

/Sikha Roy/ Primary Examiner, Art Unit 2879